

Remarks

Claims 2-10, 17-25, and 27-32 are pending. Claims 1, 11-16 and 26 have been canceled. Claims 27-32 have been added. No new matter has been added.

In response to the Office Action mailed December 17, 2002, each one of the cited references has been reviewed, and the rejections and objections made to the claims by the Examiner have been considered. For the reasons stated below, the Applicant respectively traverses all rejections and objections regarding all pending claims and submits that all of these claims are allowable.

Rejections under 35 USC § 102(b)

The Office Action rejects claims 1, 5-9, 18-21 under 35 USC § 102(b) as being anticipated by Ballyns. The Ballyns reference discloses a pressure monitoring device 60 that is pre-pressurized prior to use and placed within a tire (see Col. 8, lines 26-28). That is, the sensor is pre-pressurized, placed within the tire, and then exposed to the air pressure within the tire.

Claim 1 has been canceled thereby rendering the rejection moot. However, as discussed with the Examiner during the telephonic interview, amended claim 18 and new claims 27-28 overcome the anticipation rejection based upon Ballyns.

In sharp contrast to Ballyns, the claims 18 and 27-28 are directed to tire pressure monitoring devices that are **calibrated with the air pressure from a tire**. That is, when the tire pressure monitoring device of the present invention is secured to a tire valve, the first pressure chamber and the second pressure chamber are **pressurized with air from the tire**. The Ballyns device is pre-pressurized before being put into the tire.

In the device of claims 18 and 27-28, after the device is placed on the tire stem, the user may seal the first pressure chamber, thereby "trapping" the tire's initial air pressure within the first pressure chamber. The second chamber is also pressurized with air from the tire, but the second chamber is in constant communication with the tire. So, the first pressure chamber is pressurized at the initial pressure of the tire. The pressure of the second chamber changes as the pressure of the tire changes.

Accordingly, when the tire pressure decreases, the pressure within the second chamber concomitantly decreases. When the pressure difference between the first and second pressure chamber reaches a predetermined pressure differential, a warning signal is emitted.

Thus, unlike the Ballyns device, the device of the present invention is not pressurized prior to use.

Accordingly, it is respectfully submitted that independent claims 18, 27, and 28 are not anticipated by the Ballyns reference. Moreover, for at least the same reasons, claims 5-9 and 19-21, which variously depend from claims 27 and 18, respectively, are also patentable.

Rejections under 35 USC § 103(a)

The Examiner has rejected claims 2-4, 10-17, and 24-25 under 35 USC §103(a) as being unpatentable over Ballyns in view of Chi. The Examiner states that Ballyns teaches the basic features of the present invention except for the transparent lens, screw cap, and a conductive gasket. Furthermore, the Examiner states that Ballyns does not teach removing the device to ensure the device is properly working, adding air to the tire and reattaching the monitoring device. In order to make up for the deficiencies of Ballyns, the Examiner cites Chi as teaching a transparent lens and a conductive gasket. The Examiner also states that removing the device to ensure proper function is obvious to a person of ordinary skill because these features are in the field of monitoring tire pressure, and mere duplication of the essential working parts only involves routine skill in the art. The Examiner then concludes that it would have been obvious to modify the tire monitoring apparatus of Ballyns with a transparent lens and gasket as taught by Chi for the purpose of creating a tire monitoring apparatus that operates at optimum performance.

In response, the Applicant submits that the *prima facie* case of obviousness has not been established. In particular, as previously asserted, **the Ballyns reference does not teach a tire pressure monitoring device mountable on a tire valve that is calibrated by the air pressure within a tire.**

Moreover, the secondary reference, Chi, does not make up for this deficiency. Chi utilizes a **spring** that has a spring constant such that it is pre-calibrated to a particular air pressure. Chi does not have a first chamber that is calibrated with air from a tire. The spring of Chi is pre-calibrated, and is not calibrated from the air of a tire.

The Office Action also does not provide the requisite motivation to combine Ballyns with Chi. That is, Ballyns does not provide any motivation for a person of ordinary skill in the art to combine the Ballyns device (which operates within a tire) with the tire pressure monitoring device of Chi. Accordingly, the rejection is unsupported by the art, and the Applicant respectfully requests the rejection be withdrawn.

With respect to claims 17 and 31, the Applicant submits that the claims are not obvious in view of Ballyns and Chi for the reasons cited above. As discussed with the Examiner during the telephonic interview of January 14, 2003, the Applicant respectfully submits that **a claim reciting means plus function language must be read in light of the specification.** (See MPEP 2181). More specifically, section 2118 of the MPEP states the following:

The Court of Appeals for the Federal Circuit, in its *en banc* decision *In re Donaldson Co.*, 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994), decided that a "means-or-step-plus-function" limitation should be interpreted in a manner different than patent examining practice had previously dictated. The Donaldson decision affects only the manner in which the scope of a "means or step plus function" limitation in accordance with 35 U.S.C. 112, sixth paragraph, is interpreted during examination. Donaldson does not directly affect the manner in which any other section of the patent statutes is interpreted or applied.

When making a determination of patentability under 35 U.S.C. 102 or 103, past practice was to interpret a "means or step plus function" limitation by giving it the "broadest reasonable interpretation." Under the PTO's long-standing practice this meant interpreting such a limitation as reading on any prior art means or step which performed the function specified in the claim without regard for whether the prior art means or step was equivalent to the corresponding structure, material or acts described in the specification. However, in Donaldson, the Federal Circuit stated, per our

holding, the 'broadest reasonable interpretation' that an examiner may give means-plus-function language is that statutorily mandated in paragraph six. Accordingly, the PTO may not disregard the structure disclosed in the specification corresponding to such language when rendering a patentability determination.

The cited prior art references, either singly or in combination, do not teach or disclose the means that are disclosed in the Specification. The references do not teach a means for calibrating the pressure monitoring device with air from a tire, or a means for sensing a pressure differential as taught in the present pending application.

Consequently, Ballyns in view of Chi do not render claims 2-4, 10-17, 24-25 and 31 are obvious. The Applicant respectfully requests that the rejection be withdrawn.


Conclusion

If for any reason direct communication with Applicants' attorney would serve to advance prosecution of this case to finality, the Examiner is invited to call the undersigned attorney at the below listed telephone number. Attached hereto is a marked-up version of the changes made to the claims by The attached page is captioned "**Version With Markings to Show Changes Made.**"

The Commissioner is authorized to charge any fee which may be required in connection with this response to deposit account No. 50-1901.

Respectfully submitted,

February 5, 2003



Andrew B. Chen
Registration No. 48,508

OPPENHEIMER WOLFF & DONNELLY LLP
840 Newport Center Drive, Suite 700
Newport Beach, California 92660
Telephone: 949.823.6000
Facsimile: 949.823.6100

Customer No.: 25,204